

CLAIMS

1. Oligonucleotide useful for the detection of *Mycobacterium avium* subspecies *paratuberculosis (MAP)* selected from the group consisting of oligonucleotides of the following sequences:

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P1N	GCA TGG CCC ACA GGA CGT TGA G
P2N	CTA CAA CAA GAG CCG TGC CG
P3N	GGG TGT GGC GTT TTC CTT CG
P4N	TCC TGG GCG CTG AGT TCC TC.

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2. Set of oligonucleotides comprising alone or in combination one or more of the oligonucleotides according to claim 1, particularly the combinations of oligonucleotides P1N/P2N, P3N/P4N, P1N/P3N, P1N/P4N, P2N/P3N, P2N/P4N, P1N/P2N/P3N, P1N/P2N/P4N, P1N/P3N/P4N, P2N/P3N/P4N and/or P1N/P2N/P3N/P4N.

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3. Method for the detection of MA and/or MAP in a sample comprising the steps

- isolating DNA from the sample;
- performing a one-tube PCR using the isolated DNA from at least one of the oligonucleotides according to Claim 1;
- screening for positive PCR amplification results;
- identification of MAP containing samples,

Which method is characterized in that at least one of the oligonucleotides according to Claim 1 are used in the PCR.

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4. Method according to Claim 3 using one or more sets of oligonucleotides according to Claim 2, particularly a set comprising all four oligonucleotides.

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5. Use of the method according to Claims 3 or 4 for the detection of MAP in a sample from a living animal, in a product derived from a living creature, including human beings or animals, particularly from cattle, poultry or chicken, and/or in a sample derived from non-living origin, particularly from dust or plants.

6. Use of the method according to Claims 3 or 4 for the diagnosis of MAP infection in a living creature, including human, particularly in cattle, poultry or chicken.

7. Kit for the detection of MAP in a specimen, which comprises:

- 5 a) means of isolating DNA from the sample;
- b) oligonucleotides according to Claim 1 and/or set of oligonucleotides according to Claim 2;
- c) means of screening for positive PCR amplification results;
- d) means of identification of MAP containing samples.

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8. Kit comprising one or more oligonucleotides according to Claim 1 and/or one or more sets of oligonucleotides according to Claim 2 and a container.

9. Kit comprising all four oligonucleotides according to Claim 1 and a container.

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10. Use of the Kit according to Claim 7, 8 or 9 for the method according to Claim 3 and/or 4.

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